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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,121	03/02/2004	Hideo Yata	36856.1218	2653

7590 10/29/2004
Keating & Bennett LLP
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EXAMINER

THOMPSON, JEWEL VERGIE

ART UNIT PAPER NUMBER

2855

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/791,121

Applicant(s)

YATA HIDEO

Examiner

Jewel V Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 11-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/2/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. Acknowledgement is made of the Information Disclosure Statement filed March 2, 2004, which has been made record of and placed in the file.
2. Acknowledgement is made of the Information Disclosure Statement filed March 2, 2004, which has been made record of and placed in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Marks (3,945,532).

Regarding claim 1, Marks teaches a method of measuring a material in which the material is conveyed by a conveying unit and dropped from a discharge portion of the conveying unit to be supplied into a measuring unit arranged under the discharge portion, and is measured by the measuring unit (fig. 1), the method comprising:

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a first supplying step of supplying the material from the discharge portion (1, 2, 3) into the measuring unit (7) until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is relatively small compared to a final measuring target-value of the material (col. 3, lines 47-55); and a second supplying step of receiving a portion of the material to be supplied through the discharge portion into the measuring unit on a path where the material is dropping for recovery, whereby the material is supplied through the discharge portion into the measuring unit at a supplying rate that is smaller than that in the first supplying step (col. 4, lines 10-16); wherein the material is stopped from being supplied through the discharge portion into the measuring unit when the quantity of the material measured by the measuring unit reaches the final measuring target-value (col. 4, lines 18-22).

Regarding claim 3, Marks teaches the material is conveyed in the first supplying step by vibrating the material (col. 3, lines 55-57).

Regarding claim 4, Marks teaches the measuring unit measures the weight of the material to determine whether the quantity of the material has reached the preparatory measuring target value (col. 1, lines 23-26).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of Muranaka et al (5,887,728).

Regarding claims 2, 7 Marks fails to teach the material comprises electronic chip components. Muranaka et al teaches a separator and separation method on a conveyor comprising a mixture of electronic component chips (2). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the electronic chips of Muranaka et al in the apparatus of Marks for the purpose of providing a separation of media for electro-plating and electronic component chips and screening of good and defective electronic component chips based on whether or not the thickness of metal films formed on the surface is proper (col. 1, lines 10-15, Muranaka et al).

5. Claims 5, 6 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of Jackson (5,280,813).

Regarding claim 5, Marks fails to teach a stocking hopper is located in a non-receiving position, and when the quantity of material measured by the measuring unit reaches the preparatory measuring target value, the stocking hopper is moved to a receiving position. Jackson teaches a particle loading system comprising a gate member which has a closed position preventing particulate flow outward from the dispensing device, and an open position allowing particulate material to flow outward from the dispensing device (col. 7, lines 19-29). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the gate member of Jackson in the apparatus of Marks for the purpose of controlling the flow of the material.

Regarding claim 6, Marks teaches a conveying unit having a conveying member for conveying material to be measured, and a discharge portion from which the material conveyed by the conveying member is discharged (fig. 1); a measuring unit (7, 10) for measuring the material dropped from the discharge portion and supplied therein; a controller (15). Marks et al fails to teach a stocking mechanism arranged between the discharge portion and the measuring unit, the stocking mechanism being controlled so that an off-state and an on state of the stocking mechanism are changed over to each other, the off-state being such that the stocking mechanism recedes from a path along which the material drops so that the dropping of the material is not disturbed, the on-

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state being such that the stocking mechanism advances into the path along which the material drops so that a portion of the material can be received for recovery; the controller adapted to capture measurement data obtained in the measuring unit and to control the stocking mechanism based on the data; wherein the controller controls the stocking mechanism to be set in the off-state until the quantity of the material measured by the measuring unit reaches a preparatory measuring target value that is smaller than a final measuring target-value of the material; and the controller controls the stocking mechanism to be set in the on-state after the quantity of the material measured by the measuring unit reaches the preparatory measuring target value, and the controller stops the material from being supplied to the measuring unit through the discharge portion when the quantity of the material measured by the measuring unit reaches the final measuring target value. Jackson teaches a particle loading system comprising a gate member which has a closed position preventing particulate flow outward from the dispensing device, and an open position allowing particulate material to flow outward from the dispensing device (col. 7, lines 19-29). This gate member may be located in, above or below outlet collar (60). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the gate member of Jackson in the apparatus of Marks, wherein Marks teaches a controller (15) which provides the transducer outputs to control the rate of mass flow (col. 4, lines 10-15, Marks) and the controller is used to interrupt the flow of material (col. 4, lines 17-22, Marks), for the purpose of controlling the flow of the material by opening and closing the

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gate member; therefore the controller of Marks could, in turn control the gate member in an open and closed position.

Regarding claim 8, Marks teaches the material is conveyed in the first supplying step by vibrating the material (col. 3, lines 55-57).

Regarding claim 9, Marks teaches the measuring unit measures the weight of the material to determine whether the quantity of the material has reached the preparatory measuring target value (col. 1, lines 23-26).

Regarding claim 10, Marks teaches the measuring unit includes an electronic measuring device (10) and a metering container (7) for measuring the weight of the material (col. 1, lines 23-26).

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of Jackson as applied to claim 6 above, and further in view of Pollano et al (5,681,999).

Regarding claims 14 and 15, Marks in view of Jackson fails to teach the controller includes a microcomputer and is arranged to receive measurement data from the measuring unit; and the controller includes a microcomputer, a data memory and a program memory, wherein data relating to the final measuring target value and the preparatory measuring target value are stored in the data memory and data for operating the controller are stored in the program memory. Pollano et al teaches an apparatus for measuring dry particles comprising an electronic microcomputer, which processes the signal for obtaining the flow rate value (col. 3, lines 58-62); and Fig. 5

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shows the flow diagram corresponding to the software to be followed by the micro-controller (which is recorded at its non-volatile memory). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the microcomputer of Pollano et al in the apparatus of Marks for the purpose of measuring the angular speed, calculating and totaling the weight flow rate (col. 1, lines 66-68).

Allowable Subject Matter

7. Claims 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

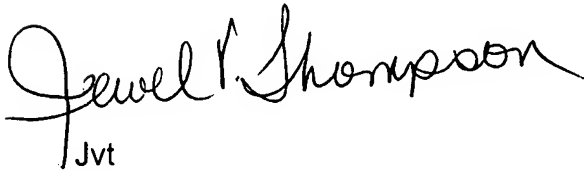
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

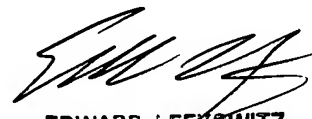
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jvt

October 22, 2004


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